



Washington State

Special Emphasis Report: Traumatic Brain Injury 2013

Understanding TBI

Traumatic brain injury (TBI) is a serious public health problem in the United States. A TBI is caused by a bump, blow, jolt, or penetration to the head that disrupts the normal function of the brain. Each year, traumatic brain injuries contribute to a substantial number of deaths and cases of permanent disability.

Impact and Magnitude of TBI

During 2013, there were 5,792 TBI-related deaths and hospitalizations in Washington State. Among those injured, 1,321 (18 per 100,000) died where TBI was reported as a cause of death on the death certificate alone, or in combination with other injuries or conditions. Another 4,471 (63 per 100,000), were hospitalized with a TBI alone, or in combination with other injuries or conditions. An unknown number of people sustained injuries that were treated in other settings or went untreated.

Causes of TBI

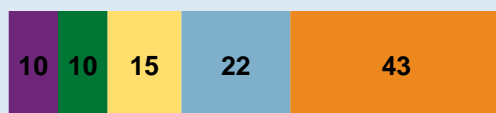
Cause of traumatic brain injury varies across the two levels of severity. Suicide was the leading cause of injury among those who died where TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions. Falls were the leading cause of injury among those who were hospitalized with a TBI alone or in combination with other injuries or conditions.

Notes: Firearm-related injuries were reported but excluded from the cause graphic because of overlap with multiple categories (e.g., homicide/assault, suicide). Firearms were related with 36 percent of deaths and 1 percent of hospitalizations. Completeness of external-cause coding for TBI-related cases can affect the accuracy of the cause classifications for hospitalizations and emergency department visits.

Deaths



Hospitalizations



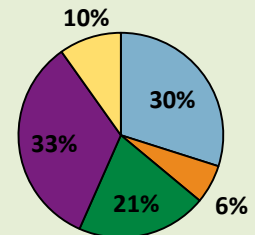
Percentage

■ 0-14 Years ■ 15-24 Years ■ 25-44 Years ■ 45-64 Years ■ 65+ Years

Figure 2: Percentage of Annual TBI-Related Deaths* and Hospitalizations, by Age, in Washington State, 2013**

■ Suicide ■ Motor Vehicle ■ Other
■ Homicide ■ Unintentional Falls

Deaths



Hospitalizations

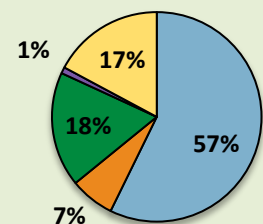


Figure 1: Percentage of Annual TBI-Related Deaths, and Hospitalizations, by External Cause, in Washington State, 2013

TBI by Age

The highest number of TBI-related deaths* were among people 65 years old and older. Among those with TBI-related hospitalizations,** people 65 years old and older were most affected.

*TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions

** TBI alone or in combination with other injuries or conditions



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TBI by Gender

Men were more likely to sustain a traumatic brain injury than women. The magnitude of this difference was greatest among those who died. Men accounted for 72 percent (28 *per 100,000*) of deaths where TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions, and 61 percent (81 *per 100,000*) of hospitalizations for TBI alone or in combination with other injuries or conditions.

TBI Prevention Strategies

CDC's National Center for Injury Prevention and Control (Injury Center) is committed to protecting people against preventable TBI by putting science into action.

- **State Injury Prevention Programs** - The Injury Center's Core Violence and Injury Prevention Program (Core VIPP) funds state health departments to estimate the effect of TBIs and to define the groups most affected. www.cdc.gov/injury
- **Heads Up** – Injury Center campaigns with free tools for health care providers, school administrators, nurses, teachers, coaches, and parents to help them recognize and respond to a TBI. www.cdc.gov/traumaticbraininjury
- **Motor Vehicle Safety** – Motor vehicle crashes are a leading cause of death, injury, and TBI in the US. CDC's primary prevention focuses on child passenger safety, seat belt use, and reducing impaired driving. www.thecommunityguide.org/mvoi
www.cdc.gov/motorvehiclesafety



Washington State TBI Activities

Prevention

- Older Adult Fall Prevention Coalitions work with local communities to provide resources for falls prevention, and strength and balance exercise classes and programs.
- Brain Injury Association of Washington and local Safe Kids coalitions host regional summits to educate coaches, parents and community members about concussion from youth sports.
- The LOK-IT-UP campaign raises awareness about the importance of safe firearm storage.
- Law enforcement agencies do regular Click-It-Or-Ticket emphasis patrols that are widely publicized. More emphasis occurs at night, when seat belt use is generally lower. They also emphasize and enforce child passenger safety seat use.
- The Impaired Driving Advisory Council and the Young Driver Task Force both address policy improvements, enforcement, education, and partnership building to reduce crashes and resulting head injuries.

Surveillance TBI-related deaths and hospitalizations are tracked on an annual basis by age group and by injury cause or mechanism. TBI data tables are on our website at <http://www.doh.wa.gov/YouandYourFamily/InjuryandViolencePrevention/Data.aspx>

Partnerships Traumatic Brain Injury Council, Department of Social and Health Services, Seattle Children's Hospital, Safe Kids Coalitions of Washington, Older Adult Fall Prevention Coalitions, Public Health – Seattle & King County, Washington Traffic Safety Commission, and the Brain Injury Alliance of Washington

Note: TBI-related cases were identified by first limiting the datasets to injury cases based on external cause of injury (deaths), and primary diagnosis (hospitalizations). All fields were then searched for TBI diagnostic codes. Reference to any commercial entity or product or service on this page should not be construed as an endorsement by the government of the company or its products or services.

WASHINGTON STATE DEPARTMENT of HEALTH

<http://www.doh.wa.gov/YouandYourFamily/InjuryandViolencePrevention.aspx>

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